

Victoria amazonica

[Synonyms : *Euryale amazonica*, *Victoria amazonum*, *Victoria regalis*, *Victoria regia*, *Victoria regia* var. *cruziana*, *Victoria reginae*]

GIANT WATER LILY is an aquatic perennial (often cultivated as an annual). Native to Amazonia and Guyana it has huge floating, tray-like, green leaves and large strongly fragrant, white flowers with many red-tipped stamens.

It is also known as Amazon water lily, Queen Victoria waterlily, *Riesenseerose* (German), Royal water lily, Royal water platter, Victoria water lily, *Viktória kráľovská* (Slovak), *Viktorie kráľovská* (Czech), *Vitoria-regia* (Portuguese), Water lily, and Water maize.

The big, dull purple to green flower buds open by mid-morning and reveal the large flowers by early afternoon. Usually only one flower blooms at any one time on a plant. It is fully open by late afternoon and through the night until the following early afternoon when petals are bent backwards and it is pollinated by a particular species of beetle. The stamens' erect position relaxes and the fruit sinks into the water to mature. One plant can produce as many as 50 leaves in any one season. These leaves are usually smaller in cultivation. Apparently their size is dependent upon the depth of the water (the deeper the water, the less crowded and large the leaves) and on the light (its reduction produces smaller leaves). The leaves' raised edge prevents the upper surface from being covered with water.

Amazonica means 'of or from Amazonia, the Amazon River region in South America'.

The discovery of this remarkable lily seems to have been long drawn out. Authorities believe that Thaddaeus Haenka (1761-1817) was the first European to find it in 1801 although this was not revealed until 1848. (He was a Bohemian botanist, mineralogist and physician who was employed by the Spanish in Peru.) The French botanist, Aimé Jacques Alexandre Bonpland (1773-1858) explored the Paraná River (after his appointment as professor of natural history in Buenos Aires in 1816) and also came across the giant water lily. Unfortunately however his travels were interrupted for nine years when he was arrested and imprisoned by the Paraguayan dictator, José Francia (1756-1840). Then in a tributary of the Amazon a sighting was made by Eduard Friedrich Poeppig (1798-1866) a German natural historian. He described the plant with the botanical name *Euryale amazonica* and published this the following year, 1833. Authorities then record that the Prussian-born British traveller, Sir Robert Hermann Schomburgk (1804-1865) was the next witness. He explored British Guiana (today known as Guyana) from 1831-1835 at the behest of the Royal Geographical Society and while out there two years later (1837) came across the lily when travelling up the Berbice River. His observation that a beetle seemed to be associated with the flower was noted by botanists.

Meanwhile Thomas Bridges had established himself as a brewer in Valparaiso, Chile in 1828 to finance his enthusiasm for collecting plants. He travelled in Argentina, Bolivia, Brazil and Chile but it was down the Amazon on his way to Trinidad that he found the lily and collected some of its seeds. Packed in wet clay he took these to London (to the Botanic Gardens at Kew) in 1846 – but only two seeds germinated and those did not flower. All was not lost however as according to some authorities Sir Robert Schomburgk himself had also introduced some of these seeds (in 1845) and some (or one plant, some say)

received either direct or via Kew reached Joseph Paxton (1801-1865) in August, 1849. At that time Paxton was the Duke of Devonshire's head gardener at Chatsworth House. In the November of that year under his care there the flower bloomed for the first time in Britain. Some authorities declare that this was considered such a remarkable event at the time that a telegram was sent to Queen Victoria (1819-1901) telling her of the achievement – and on the 13th of the month he visited her at Windsor Castle and presented one of the huge leaves with an equally large (and exotic) flower. After this Joseph Paxton is also understood to have designed a special glass and iron conservatory at Chatsworth to house the plant – the design for it was based upon the pattern on the underside of its leaves. [The conservatory was destined to be demolished in 1919. Following a fuel shortage that had led to the death of many of the plants the 9th Duke of Devonshire blew the building up.] Paxton adopted this design as the basic model for the Crystal Palace and thus permitted a new and aesthetically pleasing, radiating framework to be built to house the Great Exhibition of 1851. It was able to support safely hundreds of tons of glass. [Unfortunately this building too was destined to a sad end when the Crystal Palace was destroyed by fire in 1936.] The design of the buildings at Chatsworth and Crystal Palace was also used for the original palm houses in Kew Gardens, London. Authorities believe that the giant water lily was introduced to Ceylon (now Sri Lanka) in 1896. The leaves are strong enough to bear the weight of a small child – if he (or she) does not wriggle. [In fact in November 1849 this point was proved by the then Duke of Devonshire who placed Joseph Paxton's seven year old daughter, Annie, dressed in crinoline and long drawers on the centre of a leaf. A drawing of this scene embellished the report that appeared in the Illustrated London News of 17th November 1849. Some compared her dress to a 'costume of a fairy' which was celebrated by Douglas W. Jerrold with the words

‘On unbent leaf, in fairy guise
Reflected in the water,
Beloved, admired by heart and eyes,
Stands Annie, Paxton's daughter.

Accept a wish, my little maid,
Begotten at the minute,
That scenes so bright may never fade,
You still the fairy in it.

That all your life, nor care, nor grief
May load the winged hours
With weight to bend a lily's leaf
But all around be flowers.]

– It has been estimated that the very large leaves would still float if they bore as much as 165 lb. of evenly distributed weight. Another fascinating fact is the speed of growth of a leaf – as it unfolds it can increase in size by about 2.5 square centimetres in one hour, in 20-25 weeks one plant can achieve a leaf area to 60 square metres, and a fully grown leaf will survive for about 6-8 weeks.

The seeds (known as 'water maize' locally) are roasted and eaten by some of the South American Indian tribes.

The underground stems have been used for dyeing and tanning.